AMENDMENT TO THE SPECIFICATION

Please add the following paragraphs starting at Page 23, Line 16:

In a solenoid valve having a moving armature, there are two fundamental types of flux gaps (air gaps). These are conventionally termed working flux gaps and non-working flux gaps (see for example U.S. Patent 4,097,833 to Myers). Non-working flux gaps, as known in the art, are flux gaps in which the flux gaps between pole surfaces on a stator (e.g. pole piece) and pole surface on an armature have a substantially constant reluctance over the range of motion of the armature. Working flux gaps, as are also known in the art, are flux gaps for which there is a substantial change in reluctance over the range of motion of the armature. It will be readily apparent that the flux gaps 530a, 532a, and 530b, and similar gaps discussed above, are working flux gaps.

There is illustrated in Figs. 2-6, 8, 9, and 12, armatures having different configurations. Regardless, each armature is shown having a major diameter. A major diameter is defined as the outer diameter. In an armature having a non-uniform outer diameter, the major diameter is the largest outer diameter of the armature. A flux gap that is formed external to the major diameter is a flux gap that extends beyond the major diameter. A flux gap that is formed internal to the major diameter is a flux gap that is located substantially within the major diameter.